

2. *Paludina affinis*.

P. testa conico-ovata, suboblate perforata, solidula, lineis spiralibus impressis, subtilissimis vel obsoletis, fusco-cornea, fasciis rufofuscis 3-6 picta; spira convexo-conoidea; anfr. 5, convexi, sutura mediocriter profunda divisi; apertura paulum obliqua, subcircularis, angulo supero rotundato; peristoma subcontinuum, iterate nigro limbatum.

Alt. 27, diam. major 23, min. $18\frac{1}{2}$, apert. alt. $16\frac{1}{2}$, latit. $13\frac{1}{2}$ mill. Operculum normale.

Australia; collected at Fitzroy river and near Port Essington by Capt. Wickham, R.N.; other specimens by J. R. Elsey, Esq. (B.M.)

This species stands nearly in the same relation to the preceding as *P. fasciata*, Müll. (*P. achatina*, Drap., Lam.), to *P. vivipara*, Müll., the chief difference being in the outlines of the whorls; besides, the spiral sculpture is much less developed in *P. affinis*. The bands are almost the same as in *P. australis*; but there is a third, secondary band between the second and third principal ones.

This species varies somewhat in the elevation of the spire, several smaller specimens found at the same localities having it more produced, and therefore being of a more oblong form, and having a relatively smaller aperture. The dimensions of one of these are as follows:—altit. $19\frac{1}{2}$, diam. maj. 15, min. 12, apert. alt. $11\frac{1}{2}$, lat. 9 mill.

3. *Paludina polita*.

P. testa globoso-conica, perforata, nitida, lineis spiralibus impressis subtilissimis haud valde confertis sculpta, corneo-lutea vel pallide carnea, fasciis nullis; spira conoidea, subgradata; anfractus 5, inflati, valde convexi, sutura mediocri; apertura paulum obliqua, ovata, angulo supero modice acuto; peristoma plerumque continuum, iterate fusco limbatum.

Alt. $22\frac{1}{2}$, diam. maj. 19, min. 17, apert. alt. 13, lat. 11 mill. Operculum normale, rufum.

South Australia, on the Balonne river, New South Wales; found by John Macgillivray. Other regularly decollated specimens, of a brighter red colour, in Lake Alexandria, found by Mr. Strange. (B.M.)

XXX.—*An Examination of the Dejeanian Genus Cœlomera (Coleoptera Phytophaga) and its Affinities.* By the Rev. HAMLET CLARK, M.A., F.L.S.

THE genus *Cœlomera* of Dejean's Catalogue (3rd edition, 1837)

and of cabinets consists of a variety of forms. As at present constituted, it represents simply one of several forms of *Gallerucidæ*, which can neither be referred, on the one hand, to any of the genera shadowed forth by *Adorium*, nor, on the other, to the group of insects more immediately related to *Adimonia* and *Galleruca* proper. In Dejean's Catalogue it is made to comprehend six or seven distinct real genera, the species of which are found in North America, South America, Africa, and Asia; while in modern cabinets the limits of the group would appear to be, if possible, more undefined still; so that the name has become a sort of refuge for everything in the neighbourhood which is unknown or which has been uncharacterized. An examination of my material, during my summer holiday, has enabled me to fix with some certainty the limits of the several genera which it has comprised. I need not here analyze the Dejeanian species: they will be found in the following pages in their natural places. I have been able to trace them all. It may be convenient, however, to prefix a brief synoptical table of the several genera which contain the species, and which are dealt with in this paper.

List of Genera.

- | | |
|---|------------------|
| Antennæ robust, short, incrassated; body ovate ... | I. CEROCHROA. |
| Antennæ incrassated, cylindrical, joints 3, 4, and 5 being equal; body subcylindrical, subovate | II. ALPHIDIA. |
| Antennæ incrassated, joint 3 being longer than 4, joints 5-11 broadly compressed; body ovate..... | III. CLITENA. |
| Antennæ incrassated, joints 1, 3, 4 being subequal, and 9 and 2 minute and equal; body subparallel | IV. HYMENESIA. |
| Antennæ incrassated, serrated, joints 3-7 being the broadest, joints 3-7 equal in length; body ovate | V. ORTHOXIA. |
| Antennæ incrassated in ♂, joints 4-7 dilated and compressed, 3rd joint shorter than 4th; body ovate | VI. PYESIA. |
| Antennæ incrassated in ♂, very long, joints gradually diminishing in thickness from 1 to 11..... | VII. PROCALUS. |
| Antennæ robust, filiform, joints 3, 4, and 5 being subequal; body robust, subparallel..... | VIII. PACHYTOMA. |
| Antennæ filiform, robust, joints 1 and 3 equal, and 4, 5, 6 equal and somewhat shorter; body short, parallel | IX. SPHENORAIA. |
| Antennæ filiform, joints 4 and 5 equal and shorter than 1 and 3; body parallel; thorax much constricted at the base | X. DIRCEMA. |
| Antennæ filiform, moderate in length, joints 4 and 5 subequal; body robust or broadly ovate | XI. MONOCESTA. |
| Antennæ filiform, moderate in length, third joint very long; body generally broadly ovate | XII. CŒLOMERA. |
| Antennæ filiform, robust, nearly as long as the body, joints 3 and 5-10 nearly equal; body parallel ... | XIII. CORAIA. |
| Antennæ filiform, slender, nearly as long as the body; body subparallel..... | XIV. NESTINUS. |

Genus I. *CEROCHROA*, Gerstäck. Peters, Mossamb. 1862, Zool. Ins. 341; Bericht Akad. Berl. 1855, p. 3.

Ovata. *Caput* verticale; *palpi maxillares* subcylindrici, apice acuminato. *Thorax* elytris multo attenuatior, lævis, latere anteriore paulum emarginato, angulis anticis satis porrectis et acutis, lateribus paulum rotundatis, haud marginatis, margine postico subtransverso; disco lævi punctato. *Scutellum* subtriangulare, apice rotundato. *Elytra* thorace latiora, versus medium ampliata, lævia, vix marginata, crebre punctata. *Pedes* robusti, unguiculis fortiter appendiculatis. *Metasternum* versus apicem vel obsolete, vel in dentem acutum productum. *Antennæ* robustæ, breves, incrassatæ, articulis 4°–11^m brevibus et subæqualibus, 1° longiore, 3° primo brevior.

The species on which this genus is based (*Cerochroa ruficeps*, Gerst.) is more nearly allied to *Adorium* than to *Cœlomera*. The genus may be separated from all other neighbouring forms by its short and robust antennæ; it is also conspicuous for the very narrow breadth of the thorax. From *Adorium* it may be separated by the form of its antennæ; from *Rhombopala*, by its more elongate form; from *Cœlomera*, by its smooth and even thorax. Three species of this genus are known:—

1. *C. ruficeps*, Gerst. Bericht Verh. Akad. Berl. 1855; Peters, Reise Mossamb. Zool. 341.
2. *C. brachialis*, Suffr. Œfver. Vetens. Ak. Förh. 1858. Caffraria.
I think it probable that this species may prove to be a variety of *C. ruficeps*.
3. *C. maculicollis*, Baly, Descript. of Uncharacterized, &c., Trans. Ent. Soc. Lond. 1864, p. 232. Old Calabar.

Genus II. ALPHIDIA.

Robusta, subparallela. *Caput* verticale. *Palpi maxillares* art. penultimo globoso. *Thorax* declivis, transversus, angulis anticis depressis, posticis obsoletis; disco lævi. *Scutellum* triangulare, læve. *Elytra* robusta, lævia, punctata. *Antennæ* robustæ, incrassatæ, art. 4°–11^m gradatim incrassatis, art. 3°, 4° et 5° longitudine æqualibus. *Pedes* robusti, unguiculis simplicibus.

The genus *Alphidia* will stand near to *Clitena*; it is separated from it by its cylindrical (not flattened) incrassation of the antennæ, by the 3rd, 4th, and 5th joints being equal in length, and by the simple unguiculi.

A. comitata, (*Galleruca*) Klug, Ins. von Madagascar, p. 124.

A common species, apparently, in Madagascar. In colour flavous, with elytra bright green or bluish green. Length 4½, breadth 2½ lines.

Genus III. CLITENA, Baly, Descript. of Uncharacterized, &c.,
Trans. Ent. Soc. Lond. 1864, p. 229.

Calloplistria, Chev. Dej. Cat. p. 402.

Robusta, subparallela. *Caput* fortiter punctatum. *Thorax* transversus, angulis anticis prominulis, margine anteriore circulariter emarginato, lateribus subrotundatis et marginatis, basi subcirculari et leviter marginato; disco lævi (vix ut in *Cœlomera* transverse depresso) punctato. *Scutellum* subquadratum, apice circulari. *Elytra* thorace latiora, parallela, apice rotundata, ante medium transverse depressa vel constricta, lævia, punctata, nitida. *Antennæ* robustæ, satis elongatæ, art. 1°, 3° et 4° subæqualibus, art. 2° brevi, art. 5°–11^m latis compressis, art. 6°–11^m brevibus. *Pedes* robusti, unguiculis bihamatis.

Clitena differs from *Cœlomera* and others in the form of its elytra, which are more robust and antemedially depressed, in the smooth form of the thorax, which shows no trace of the usual deep transverse depression, and especially in the peculiar articulation of the antennæ, the apical joints of which are flattened, broad, and short. Two species have been described by Mr. Baly—*C. limbata* and *C. melancholica*, both from Siam.

C. cyanea.

C. Indica, Dej. Cat.

C. robusta, subparallela, cyanea, pedibus et antennis nigris; *caput* fortiter punctatum, nigro-cyaneum; *thorax* leviter punctatus; *scutellum* nigrum; *elytra* robusta, ante apicem transverse depressa, lævia, punctata; *corpus subtus*, *antennæ*, et *pedes* vel nigra vel nigro-cyanea.

Long. corp. lin. 5; lat. lin. $2\frac{3}{4}$.

Java.

Genus IV. HYMENESIA.

Parallela, subdepressa. *Caput* verticale. *Palpi maxillares* art. penultimo triangulari, robusto. *Thorax* transversus, angulis anticis brevibus, posticis rotundatis, disco inæquali. *Scutellum* triangulare, læve. *Elytra* parallela, confuse punctata. *Antennæ* robustæ, articulis presertim apicalibus inæqualibus (subcylindricis, vix depressis), art. 1°, 3° et 4° subæqualibus, 5°, 6°, 7° et 8° brevioribus et robustioribus, 9° et 2° brevibus, minutis æqualibus 10° et 11° conjunctis. *Pedes* robusti, tarsorum art. basali et 2° penitus æqualibus, unguiculis bipectinatis.

I have formed this genus on the species *H. Tranquebarica*, Fab.: it is quite distinct, by reason of the very peculiar articulation of the antennæ.

H. Tranquebarica, Fab. Syst. El. i. p. 479. 8, Suppl. p. 93. 6, 7, is punctate and rufous, the antennæ, legs, and underside being black; the elytra are thickly punctate and rufous, the

apex being marked by a purple transverse band, which broadly extends, near the margination, for nearly half the elytra. The length is $4\frac{1}{2}$, breadth $2\frac{1}{2}$ lines. From the East Indies.

Genus V. ORTHOXIA.

Subparallela et satis depressa. *Caput* verticale. *Palpi maxillares* articulis apicali et penultimo globosis. *Thorax* transversus, margine antico transverso, lateribus subrotundatis, margine postico sinuato, angulis anticis vix prominentibus, disco in typo inæquali. *Scutellum* triangulare. *Elytra* thorace paulum latiora, parallela. *Antennæ* robustæ, serratæ, articulis (presertim 3^o-7^m) apud apices incrassatis, art. 3^o-7^m longitudine subæqualibus. *Pedes* robusti; unguiculis ad apices extremos, bihamatis.

This genus is nearly related to *Monocesta*, but differs from it in the globularly inflated maxillary palpi, in the minute bifurcation of the unguiculi (those of *Monocesta* being cleft almost to the base), and the serrated articulation of the antennæ.

O. Boisduvallii, Dej.

O. subparallela, satis robusta, crebre rugosa, rufa, elytris, antennis, capite et pedibus nigris; *caput* rugosum, nigrum; *thorax* transversus, angulis anticis subobsoletis, marginibus leviter rotundatis, versus apicem obsolete angulatis, basi sinuata, disco depressione media basali, alteraque utrinque inæquali obliqua versus latera; *thorax* crebre punctatus, rufus; *scutellum* rufum; *elytra* thorace paulum latiora, parallela, robusta, creberrime punctata, obsolete tomentosa, nigra; *antennæ* robustæ, articulis 3^o-6^m sensim ampliatis, nigrae: *corpus subtus* rufum; *pedes* nigri. Long. corp. lin. 4; lat. lin. 2.

Java.

Genus VI. PYESIA.

Differt a genere *Monocesta* in antennis art. 3^o primo brevior, tenui, art. 4^o tertio multum longior, art. 5^o et 6^o subæqualibus et tertio paulum longioribus; antennis in ♀ simplicibus, filiformibus; in ♂ art. 4^o-7^m dilatatis, compressis.

P. laticornis, Germ. Insect. Spec. 589, 843.

Closely allied in pattern to *M. consularis*, Dej., but a much smaller insect, and more depressed in form; the elytra are not finely rugose, but levigate and punctate. The articulation also of the antennæ, both in ♀ and ♂ (which is the special character of the separate genus into which it must be erected), abundantly distinguishes it from this insect.

Brazil.

Genus VII. PROCALUS.

Robustus, parallelus, brevis. *Caput* verticale. *Palpi maxillares* elongatuli. *Thorax* magnus, transversus, vix elytra amplitudine

æquans, margine anteriore valde excavato, angulis anticis rectis, lateribus subrotundatis, marginatis, angulis posticis obsolete, basi transversa, disco lævi. *Scutellum* triangulare, læve. *Elytra* parallela, brevia, robusta, thorace paulum latiora, punctata (punctis confusis, inæqualibus); *antennæ* vel filiformes vel incrassatæ; in ♂ penitus corpus ipsum longitudine æquantes, et ad basin valde robustæ, compressæ, sensim versus apicem attenuantur; art. 1° valde ad apicem ampliato, 2° et 3° minoribus, brevioribus, et subæqualibus, 4°, 5° et usque ad 11^m longitudine subæqualibus, latitudine sensim attenuatioribus; in ♀ *antennæ* filiformes; *pedes* robusti, satis breves, femoribus subincrassatis, tibiis versus apicem robustioribus et ad insertionem tarsorum subtus excavatis; unguiculi ab infra breviter utrinque bidentati.

This diagnosis is based on a Chilian species, *Cœlomera mutans* of cabinets, which is very different from all allied groups, not only by reason of its shorter and more robust form, but also by the largely developed basal joints of the *antennæ* in the male.

P. mutans.

P. et colore et maculis incertus, flavo-viridis vel fuscus, thorace et elytris, vel neutro vel utroque, nigro maculatis; *caput* longitudinaliter oblique foveolatum, rufo-flavum; *thorax* rarius punctatus, vel flavus vel nigro maculatus, maculis quatuor (duabus mediis et una utrinque postmedia laterali); *scutellum* impunctatum; *elytra* punctis subordinatis minutis, plerumque flava, sed aliquando maculis nigris juxta basin transverse ordinatis, maculisque etiam juxta apicem; *antennæ* nigræ, flavo annulatæ; *corpus subtus* in ♂ abdominis apice fortiter ad medium foveolato, fuscescens, abdomine aliquando rufo; *pedes* rufi, tibiis et tarsis nigris.

Long. corp. lin. 3-4; lat. lin. 1 $\frac{3}{4}$ -2.

The head-quarters of this species is Chili, where it would appear to be abundant; it is widely distributed. I have received specimens from Brazil and also from Bolivia.

Genus VIII. PACHYTOMA.

Robusta, brevis, parallela. *Caput* breve, verticale. *Palpi maxillares* graciles, elongatuli. *Thorax* declivis, elytris paulum attenuatior, angulis anticis prominulis, lateribus paulum curvatis, margine basali subsinuato; disco lævi, punctato. *Scutellum* triangulare, apice truncato. *Elytra* brevia, robusta, confuse punctata. *Antennæ* filiformes, robustæ, art. 1° longissimo, 2° brevi, 3°, 4° et 5° subæqualibus. *Pedes* robusti, unguiculis pectinatis.

1. *P. Westermanni*, Dej. Cat.

P. e majoribus, fusca, antennis, pedibus et corpore subtus nigris; *caput* longitudinaliter foveolatum, punctatum; *thorax* crebre et fortiter punctatus; *scutellum* nigrum; *elytra* crebre punctata;

corpus subtus et pedes nigra; antennæ nigri, articulis 1^o-3^m flavescenscentibus.

Long. corp. lin. 6; lat. lin. 3½.

Western Africa.

2. *P. flava*.

P. subovalis, lata, punctata, flava; caput in medio leviter longitudinaliter foveolatum, punctatum, flavum, basi transverse nigra; thorax transversus, lateribus et angulis posticis rotundatis, lateribus marginatis, disco crebre punctato; scutellum triangulare, nigrum; elytra post medium paulum ampliata, confuse et minute punctata vel rugosa; antennæ nigro-fuscæ; pedes et corpus subtus nigra.

Long. corp. lin. 5, lat. lin. 3.

Natal.

Genus IX. SPHENORAIA.

Lata, subdepressa, brevis, parallela. Caput verticale. Palpi maxillares art. penultimo incrassato, brevi. Thorax transversus, lateribus marginatis et rotundatis, angulis anticis prominulis, basi subsinuato. Scutellum triangulare, læve. Elytra parallela, brevia, striato-punctata (punctis interdum penitus confusis). Antennæ filiformes, robustæ, art. 1^o et 3^o æqualibus, et art. 4^o, 5^o et 6^o (articulo primo paulum minoribus) inter se æqualibus. Pedes tenues, unguiculis simplicibus vel leviter appendiculatis.

1. *S. flavicollis*.

S. rufo-flava, elytris (marginibus et sutura exceptis) nigris; caput transverse foveolatum, impunctatum; thorax rufo-flavus, impunctatus (punctis sparsis in medio disco obsoletis); scutellum rufo-flavum, impunctatum; elytra parallela, punctata (punctis nec magnis nec acie instructis, confuse ordinatis), fusco-nigra, sutura et marginibus tenuiter flavis; pedes, antennæ et corpus subtus flava.

Long. corp. lin. 3¾; lat. lin. 2.

Northern India.

2. *S. nigripennis*.

S. flava, elytris, thorace maculis et femoribus apicalibus nigris; caput inter oculos transverse foveolatum, læve, flavum basi nigra; thorax flavus, macula utrinque nigra insulata, fortiter sed sparsim punctata et paulum depressa; scutellum læve, nigrum; elytra striato-punctata (punctis magnis et profundis), nigra; antennæ nigro-fuscæ, art. 1^o-4^m flavescenscentibus; corpus subtus et pedes fusco-flavescentia.

Long. corp. lin. 4; lat. lin. 2½.

Northern India.

Genus X. DIRCEMA.

Parallelum, satis depressum. Caput verticale. Palpi maxillares elongatuli. Thorax transversus, margine anteriore paulum emarginato, angulis anticis porrectis, lateribus oblique arcuatis, angulis

posticis obsolete, disco valde transverse depresso. *Elytra* parallela, depressa, subtiliter rugosa. *Antennæ* filiformes, art. 1° et 3° subæqualibus, 2° minuto, 4° et 5° subæqualibus et tertio paulum brevioribus. *Pedes* graciles, unguiculis utrinque bifidis.

The form of the thorax in this group is peculiar; it is narrowly transverse, the anterior angles are laterally produced considerably beyond the head; the sides converge gradually towards the base, being arcuate or constricted medially; the basal angles are slightly prominent; and the disk of the thorax is distinctly and deeply transversely depressed. I know of three exponents of this form, all common species in the tropics of South America.

1. *D. nigripenne*, Fab. Ent. Syst. i. ii. 14. 9; Syst. El. i. 480.

Notable by its uniformly opaque-black elytra (rugose and tomentose) and its clearly coloured rufous or flavous thorax. Long. corp. lin. $4\frac{1}{2}$ – $5\frac{1}{2}$; lat. lin. 2 – $2\frac{1}{4}$.

The species is very common in Cayenne: some examples have the apical joints of the black antennæ testaceous; and one example in my cabinet has the head testaceous instead of black.

2. *D. cinctipenne*.

D. oblongum, parallelum, opacum, reticulosum, tomentosum, fusco-flavum, elytris (sutura et marginibus exceptis) et capite nigris vel viridi-nigris; *caput* inter oculos longitudinaliter foveolatum, crebre punctatum, nigrum; *thorax* fortiter transverse depressus, punctatus, plus minus tomentosus, flavus, macula utrinque nigra magna aliquando insulata; *scutellum* flavum; *elytra* parallela, nigra vel nigro-viridia, sutura et marginibus tenuiter flavis; *pedes* nigri, femoribus plus minus flavis; *corpus* subtile flavo-fuscum; *antennæ* nigrae, art. 9°–11^m flavis.

Long. corp. lin. $3\frac{1}{2}$ –7; lat. lin. $1\frac{1}{2}$ – $2\frac{1}{3}$.

D. cinctipenne varies not only in size, but in the sculpture and coloration of the thorax, which is either entirely flavous or flavous with two submedial black markings, one on either side, these markings sometimes occupying nearly the whole disk. The species has been found at Para, by Mr. Bates and others. I have two Columbian representatives of it, which have the elytra opaque green instead of black, and the thorax of which is not so deeply depressed. I have seen some interesting examples of this species in Mr. Baly's cabinet, which, at first sight we are tempted to declare, represent distinct species: I have little doubt, however, on more mature examination, that the above diagnosis is the true definition of the species. The insect is as variable as it is beautiful; and at present, at any rate, we have not sufficient material to justify us in breaking it up into distinct races or species.

3. *D. ruficrus*, Chev.

D. parallelum, opacum, tomentosum, rufo-flavum, elytris, antennis et genibus nigris; *caput* leviter rugosum, impunctatum, flavum; *thorax* subpubescens, rufo-flavus; *scutellum* fuscum; *elytra* parallela, tomentosa, nigra; *antennæ* nigrae; *corpus* subtus rufo-fuscum; *pedes* fusci, femoribus rufo-fuscis.

Long. corp. lin. $4\frac{1}{2}$; lat. lin. $1\frac{3}{4}$.

Cayenne.

GENUS XI. MONOCESTA.

E majoribus, robusta, plerumque versus apicem dilatata. *Caput* verticale, basi longitudinaliter foveolatum. *Thorax* transversus, margine anteriore paulum emarginato; angulis anticis sat productis, lateribus subrotundatis; angulis posticis omnino vel penitus obsoletis; discus transverse et fortiter depressus est. *Scutellum* transversum, apice rotundatum. *Elytra* robusta, thorace latiora, post medium plus minus dilatata, aliquando versus apicem dehiscentia, et utrinque angulata, marginata, punctata. *Antennæ* vel filiformes robustæ vel subincrassatæ, art. 1^o apice incrassato, art. 1^o, 3^o et 4^o subæqualibus, art. 2^o minore, art. 5^o et 6^o subæqualibus, paulum quarto brevioribus, art. 7^o-11^m paulum sexto brevioribus et gradatim attenuatis. *Pedes* robusti, art. tarsorum basali penultimo duplo longiore; unguiculis fortiter utrinque bifidis.

The genus *Monocesta*, as thus defined, is very natural: it represents those species in which the elytra are postmedially dilated, the thorax is transversely depressed, and the antennæ in the more broadly ovate species filiform, in the more parallel species subincrassated, the third and fourth joints being subequal, and the apical joints sufficiently produced and attenuate. These characters comprehend two distinct subgroups, which will constitute an excellent genus, well bounded and separated from the several other forms with which the species representing them have been, in Dejean's Catalogue, mixed up. The metropolis of the genus is evidently the tropical region of South America and Mexico. One species (*M. coryli*) is found as far north as Illinois, where it infests the hazel; and one other (*M. elegantula* of this paper) I have received as from Brazil.

DIVISION A.

Species of large size; in form (for the most part) postmedially dilated; the thorax is deeply transversely depressed; the antennæ filiform and sufficiently elongate. Species 1-12.

Section I.

Elytra for the most part bright blue or bright green, with flavous markings. Sp. 1-5.

1. *M. imperialis*.

M. grandis, apice dilatato, crebre punctata, nigro-cærulea, elytrorum

dimidio apicali rufo-flavo; *caput* fovea longitudinali ad frontem, impunctatum; *thorax* subtiliter punctatus; *scutellum* transverse quadratum, impunctatum; *elytra* thorace latiora, et versus apicem multum ampliata, marginata, crebre punctata; *antennæ*, *corpus subtus* et *pedes* nigra, femorum apicibus rufo-fuscis.

Long. corp. lin. $9\frac{1}{2}$; lat. lin. ad humeros 4, ad apicem $6\frac{1}{2}$.

Columbia.

2. *M. equestris*, Dej.

M. e majoribus, versus apicem subampliata, crebre punctata, viridis vel azurea, fascia media in elytris transversa flava; *caput* longitudinaliter foveolatum, punctatum; *thorax* ut in speciebus aliis in medio valde transverse depressus, punctatus; *scutellum* subquadratum, impunctatum; *elytra* versus apicem ampliata, crebre et rugose punctata, fascia recta flava transversa ad medium, versus margines latior, elytra ornat; *antennæ*, *corpus subtus* et *pedes* nigra.

Long. corp. lin. $9-6\frac{1}{2}$; lat. lin. $5\frac{3}{4}-2\frac{1}{2}$.

M. equestris, the Cayenne species, differs clearly and uniformly in pattern from the Mexican species, *M. ducalis*. In the species before us, the transverse band on the elytra is medial and even, sometimes, by reason of its greater breadth towards the margins, being slightly inflected; in *M. ducalis* the transverse band is never straight, but arcuate, in each elytron, broader in size and more irregular in pattern.

Mr. Baly has shown me in his cabinet a species taken by Mr. Bates on the Amazons, in which the transverse band is a trifle broader, and rather nearer the scutellum, than in *M. ducalis*—*M. Batesii*, Baly. It is probable that the two are slight modifications of the same species.

The males of *M. equestris* have sometimes the apex of the elytra, at a little distance from the suture, produced into an angle.

A common species in Cayenne.

3. *M. ducalis*.

M. elongata, versus apicem subampliata, punctata, nigro-cærulea, fascia lata et apice flavis; *caput* foveolatum, punctatum; *thorax* transverse depressus, leviter punctatus; *scutellum* læve; *elytra* crebre punctata vel subrugosa, nigro-cærulea, fascia lata inæquali, ad margines versus humeros et apicem tendente, et apice flavis; *pedes*, *antennæ* et *corpus subtus* nigra.

Long. corp. lin. 8-6; lat. lin. 5-3.

I have before me several specimens of this form, which agree entirely in pattern, and are readily separated from the Cayenne species, *M. equestris*: the band of the elytra is broader, more irregular in outline, and extending along the margination to the apex, and sometimes to the shoulders. I have an interesting

variety in which the transverse band is represented by a medial spot, the margins being obscurely flavous.

Mexico. A common species.

4. *M. splendida*.

M. versus apicem leviter ampliata, punctata, læte viridis; *caput* obsoleto punctatum; *thorax* crebre punctatus, ad medium transverse depressus; *scutellum* subquadratum, leviter punctatum; *elytra* crebre punctata (punctis minutissimis) et leviter rugosa; *corpus subtus* fusco-viride, testaceo pubescens; *antennæ* nigræ; *pedes* nigro-virides.

Long. corp. lin. $7\frac{1}{2}$, lat. lin. $4\frac{1}{2}$.

Conspicuous among its congeners by its uniform brilliant green colour.

Para. I have in my collection a single example, received from the Marquis La Ferté.

5. *M. consularis*, Dej.

M. subparallela, postice paulum dilatata, satis robusta, vix depressa, tomentose rugosa, vix punctata, rufo-flava, *elytris* (fascia media excepta rufo-flava) viridibus; *caput* longitudinaliter foveolatum, rugosum, rufum; *thorax* rugosus, rufus; *scutellum* rufum; *elytra* subparallela, apice transverse rotundata et subdilatata, subtiliter rugosa, cærulea, fascia media transversa æquali rufo-flava; *antennæ* fusco-nigræ, art. 1^o rufo; *pedes* et *corpus subtus* rufa.

Long. corp. lin. $6\frac{1}{2}$; lat. lin. $3\frac{3}{4}$.

This species resembles as to pattern the *Pyesia laticornis* of Germar; but, besides being a larger insect, it is more robust, less depressed, and the surface is not, as in that species, punctate, but thickly rugose and tomentose.

Brazil. One of the examples in my collection is labelled Mexico.

Section II.

Elytra for the most part flavous, with darker markings. Sp. 6-12.

6. *M. illustris*.

M. satis lata, subparallela, crebre punctata, pube flava subvestita, rufo-flava, *elytrorum* apicibus fuscatis; *caput* fronte foveolatum, punctatum; *thorax* transverse ad medium depressus, punctatus; *elytra* leviter pubescentia, punctata, rufo-flava, apicibus nigris; *antennæ*, *pedes* et *corpus subtus* nigra.

Long. corp. lin. 6; lat. lin. $3\frac{1}{2}$.

Cayenne.

7. *M. coryli*, (*Cœlomera*) Say, Acad. Philad. iii. 1824, p. 455; Complete Writings, vol. ii. p. 220.

This is the only species which represents the genus on the

North American continent: it is found in Illinois, Maryland, and Virginia; in the latter State it is so abundant that it often entirely strips the *Corylus americanus*, on which it feeds.

8. *M. depressa*.

M. late ovalis, valde depressa, flava, antennis, elytrorum marginibus et apice necnon corpore subtus nigris; *caput* longitudinaliter foveolatum, leviter punctatum; *thorax* valde ad medium transverse depressus, impunctatus; *scutellum* flavum; *elytra* lata, valde depressa, late marginata subtiliter rugosa, subpubescentia, flava, apice et marginibus late nigrescentibus; *antennæ* nigræ, art. 1^o-3^m flavis; *corpus subtus* nigrum; *pedes* flavi.

Long. corp. lin. 5½; lat. lin. 3¼.

I am indebted to Mr. Baly for this species, received by him from the river Magdalena.

9. *M. Balyi*.

M. late ovalis, nigra, thorace, capite, elytrorum basi et femoribus anticis rufo-flavis; *caput* leviter longitudinaliter foveolatum, impunctatum; *thorax* late transverse depressus, lateribus ad medium subangulatis, impunctatus; *scutellum* impunctatum, rufum; *elytra* ampliata, late marginata, subdepressa, rugosa, opaca, nigra, basi tenuiter fulvescente; *antennæ* fusco-nigræ, art. 1^o et 2^o flavis; *corpus subtus* nigrum; *pedes* nigri, femoribus anticis rufo-flavis.

Long. corp. lin. 7; lat. lin. 4.

Brazil.

10. *M. elegantula*.

M. pallide purpurea, thorace maculisque 4 elytrorum flavo-pubescentibus; *caput* ad basin foveolatum; *thorax* omnino flavo pubescens; *elytra* macula utrinque magna media, alteraque minore circulari ad apicem flavo pubescentibus; *antennæ* rufo-fuscæ; *pedes* et *corpus subtus* fusco-purpurea.

Long. corp. lin. 5; lat. lin. 3.

Brazil.

11. *M. Hopfneri*, Dej. Cat.

M. subparallela, crebre punctata vel rugosa, testaceo-flava, tibiis, tarsis et antennis nigris; *caput* leviter longitudinaliter foveolatum; *thorax* transversus, subquadratus, transverse modice depressus, lateribus rotundatis, crebre et fortiter punctatus; *scutellum* subtriangulare, subpunctatum; *elytra* thorace latiora, subrugosa vel crebre punctata; *antennæ* sat elongatæ, nigræ; *corpus subtus* fuscum; *pedes* flavo-fusci, tibiis et tarsis nigris.

Long. corp. lin. 5; lat. lin. 2½.

M. Hopfneri may be distinguished not only by its flavous coloration, but by its thorax, which is less deeply transversely depressed, and coarsely and closely punctate.

Mexico.

12. *M. sanguinicollis*.

M. elongatula, postice subdilatata, crebre punctata, nigra, thorace rufo, elytris rufo vittatis; *caput* punctatum, rufum; *thorax* in medio transverse depressus, lateribus rotundatis, punctatus, rufus; *scutellum* impunctatum, rufum; *elytra* versus apicem subdilatata, satis depressa, crebre punctata, rufa, vittis duabus parallelis (subsuturali et laterali) basin sed vix apicem attingentibus, post medium elytrorum conjunctis; *antennæ* nigræ, art. basali interdum rufo; *pedes et corpus subtus* vel nigra vel rufo-fusca.

Long. corp. lin. $3\frac{1}{3}$ – $4\frac{1}{2}$; lat. lin. $1\frac{3}{4}$ – $2\frac{1}{4}$.

I have examples of this species from Bolivia, and also from Brazil.

[To be continued.]

XXXI.—On the Occurrence of *Orcynus alalonga* on the Coast of Devon. By Dr. W. R. Scott.

SEVERAL fish of but rare occurrence in British waters have from time to time been taken on the Cornish and Devon coasts. The close and accurate observations of Mr. Couch have seldom allowed any found on the former to pass unnoticed. On the coast of Devon, however, recorded captures of these rarer species are less common, owing probably in some degree to the want of that zealous watchfulness which has animated the labours of the Cornish ichthyologist. Amongst the rarer species that pay our coasts an occasional visit are those of the genus *Thynnus*; and amongst the very rarest of these is the Germon, separated now, however, by Cuvier into a distinct genus, and which fish he has named *Orcynus alalonga*, from the length of its pectoral fin—which constitutes the chief, if not the only, difference between it and the true Tunnies.

The *Orcynus alalonga* has been very rarely found in British seas. One has been recorded as taken at Portland, which was presented to the British Museum, and it has been twice taken in Mounts Bay, Cornwall.

I have pleasure, therefore, in now recording another specimen of this rare British fish, taken in Devonshire. This fish was captured on the 26th of August last, not really in channel, but a little way up the river Exe, about three miles from its mouth, and at about half-tide. The fish had got entangled amongst some palings which had been driven into the river about a foot from the edge, where a kind of quay had been made, and which formed a *cul-de-sac*. Into this the fish got; and so violent were its struggles to get out, that it drew the attention of some workmen who were at a little distance, when one of them got his gun